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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/764,760

01/26/2004

Joel Thomson

68883/RSM

8777

23432 7590 03/19/2009
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EXAMINER

LEYSON, JOSEPH S

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

03/19/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/764,760	Applicant(s) THOMSON, JOEL	
	Examiner JOSEPH LEYSON	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 17-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☒ Claim(s) 6-13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 December 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 17-21 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse as mentioned in the office action mailed on June 12, 2008.

Drawings

2. The drawings were received on December 15, 2008. These drawings are acceptable.

Claim Objections

3. Claims 6-13 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claims 6-13 only further recite the material intended to be used with the claimed apparatus, and thus do not further limit the structure of the claimed apparatus. A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987); see MPEP 2114. "Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim." Ex parte

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Thibault, 164 USPQ 666, 667 (Bd. App. 1969). Furthermore, “[i]nclusion of material or article worked upon by a structure being claimed does not impart patentability to the claims.” In re Young, 75 F.2d 996, 25 USPQ 69 (CCPA 1935) (as restated in In re Otto, 312 F.2d 937, 136 USPQ 458, 459 (CCPA 1963)). See MPEP 2115.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 recites a check valve having means for selectively locking the check valve in an open position in response to axial motion along the barrel to allow bi-directional flow of material along the screw, which is not originally disclosed and thus is NEW MATTER. The original specification does not disclose a check valve having means for selectively locking the check valve in an open position in response to ANY axial motion OF ANY ELEMENT along the barrel to allow bi-directional flow of material along the screw. The instant specification (i.e., p. 8, lines 14-20) discloses a check valve having means for selectively locking the check valve in an open position in response to reverse axial motion of the screw along the barrel to allow bi-directional

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flow of material along the screw. The original specification does not disclose a check valve having means for selectively locking the check valve in an open position in response to ANY axial motion OF THE CHECK VALVE along the barrel to allow bi-directional flow of material along the screw, as recited by instant claim 2. The original specification does not disclose a check valve having means for selectively locking the check valve in an open position in response to ANY axial motion of the screw along the barrel to allow bi-directional flow of material along the screw, as recited by instant claim 3. The original specification does not disclose means for selectively unlocking the check valve from the open position in response to ANY rotational motion of the screw, as recited by instant claim 4. The original specification (i.e., p. 17-20) discloses means for selectively unlocking the check valve from the open position in response to normal counterclockwise rotational motion of the screw. The original specification does not disclose a poppet-type check valve or a ball-type check valve having means for selectively locking the check valve in an open position in response to axial motion along the barrel to allow bi-directional flow of material along the screw, as recited by instant claim 16.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 1 recites a check valve having means for selectively locking the check valve in an open position in response to axial motion along the barrel to allow bi-directional flow of material along the screw, which is indefinite. Claim 1 does not recite which element is capable of the axial motion, and thus the scope of claim 1 is unclear.

Claim 6 recites the apparatus further comprising a quantity of cleaning compound in the barrel, which is incorrect. Cleaning compound is NOT a structural element of the claimed apparatus, as understood from the instant specification. In other words, whether you have plastic melt or cleaning compound in the apparatus, the apparatus still has the same exact structure.

Claim 16 recites that the check valve can be a poppet-type check valve or a ball-type check valve, which is incorrect. As understood from the instant specification, only the ring-type valve, NOT a poppet-type check valve or a ball-type check valve, is capable of having means for selectively locking the check valve in an open position in response to reverse axial motion of the screw along the barrel to allow bi-directional flow of material along the screw.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Heathe et al. (US 4,988,281).

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Heathe et al. (US 4,988,281) teach an apparatus (figs. 1-3) for a reciprocating screw injection molding machinery having a barrel 1 and a screw 2 which rotates in the barrel 1 comprising a ring-type check valve (i.e., figs. 1-3), the check valve comprising a body 3 having a protrusion 30; a sliding ring 11 having a slot 33; and a valve seat 15, such that the check valve locked in an open position to allow bi-directional flow of material along the screw comprises the protrusion 30 located in a bottom of the slot 33 (i.e., figs. 1-3), means for selectively locking the sliding ring in the open position in response to screw rotation (i.e., col. 3, lines 20-31), means for selectively unlocking the sliding ring from the open position in response to rotational motion of the screw (i.e., col. 3, lines 20-31), means 21 for at least partially blocking the egress of the material from the barrel 1, and means 5 for attaching the check valve to the screw 2. The sliding ring is also capable of being locked in the open position in response to axial motion of the sliding ring or the screw because axial motion of sliding ring or the screw is capable of causing the sliding ring to move to the locked open position by the cam action of the protrusion and slot (i.e., figs. 1-3). In applicant's apparatus, the axial motion of the screw also causes the sliding ring to move to the locked open position by cam action of the protrusion and slot.

Alternatively, Heathe et al. (US 4,988,281) teach an apparatus (figs. 4-7) for a reciprocating screw injection molding machinery having a barrel 100 and a screw (i.e., col. 3, lines 49-52) which rotates in the barrel 100 comprising a ring-type check valve (i.e., figs. 4-7), the check valve comprising a body 103 having a protrusion 108; a sliding ring 111 having a slot 119; and a valve seat (i.e., col. 3, lines 49-56), such that the

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check valve locked in an open position to allow bi-directional flow of material along the screw comprises the protrusion 108 located in a bottom of the slot 119 (i.e., figs. 4-7), means for selectively locking the sliding ring in the open position in response to screw rotation (i.e., col. 3, lines 57-68), means for selectively unlocking the sliding ring from the open position in response to rotational motion of the screw (i.e., col. 3, lines 57-68), means (i.e., 21; col. 3, lines 49-52) for at least partially blocking the egress of the material from the barrel 1, and means (i.e., 5; col. 3, lines 49-52) for attaching the check valve to the screw. The sliding ring is also capable of being locked in the open position in response to axial motion of the sliding ring or the screw because axial motion of sliding ring or the screw is capable of causing the sliding ring to move to the locked open position by the cam action of the protrusion and slot (i.e., figs. 4-7). In applicant's apparatus, the axial motion of the screw also causes the sliding ring to move to the locked open position by cam action of the protrusion and slot.

As to claims 6-13, these claims only further recite materials to be used by the claimed apparatus, which does not have any patentable weight in apparatus claims. A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987); see MPEP 2114.

"Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim." *Ex parte Thibault*, 164 USPQ 666, 667 (Bd. App. 1969). Furthermore, "[i]nclusion of material or

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article worked upon by a structure being claimed does not impart patentability to the claims.” In re Young, 75 F.2d 996, 25 USPQ 69 (CCPA 1935) (as restated in In re Otto, 312 F.2d 937, 136 USPQ 458, 459 (CCPA 1963)). See MPEP 2115.

Response to Arguments

10. Applicant's arguments with respect to the instant claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSEPH LEYSON whose telephone number is (571)272-5061. The examiner can normally be reached on M-F 9AM-5:30PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gupta Yogendra can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert B. Davis/
Primary Examiner, Art Unit 1791

/J. L./
Examiner, Art Unit 1791